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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,274	12/04/2003	Barry J. Oldfield	10001491-4	7124

7590 11/16/2005

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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TU, CHRISTINE TRINH LE

ART UNIT	PAPER NUMBER
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2138

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/728,274

Applicant(s)

OLDFIELD ET AL.

Examiner

Christine T. Tu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-14 is/are allowed.
- 6) ☒ Claim(s) 1,2,12,15-25 and 35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

1. Claims 1-35 have been examined.

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims (15 & 19) and 16-18 are rejected under the judicially created doctrine of double patenting over claims 1, and 2-4 of U. S. Patent No. 6,687,872, respectively, since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

"A method of calculating parity segments comprising:

providing a parity calculation module configured to calculate one or more parity segments,

with the parity calculation module:

receiving one or more data segments that are to be used to  
calculate one or more parity segments;

receiving one or more parity coefficients that are to be used to  
calculate the one or more parity segments;

operating on the one or more data segments and the one or more  
parity coefficients to provide an intermediate computation result,

writing the intermediate computation result to one or more local  
buffers, and

within one clock cycle of an associated clock, receiving (a) the  
intermediate computation result from the one or more local buffers, (b)  
one or more additional data segments and (c) one or more additional  
parity coefficients, and operating on them to provide a result that is  
stored in the one or more local buffers”;

“Wherein the parity calculation module comprises one or more local memory  
components configured to locally hold data that is used in the calculation of the parity  
segment”;

“the parity calculation module comprise an application specific integrated circuit  
(ASIC)”;

“one or more local buffers comprises SRAMs”; and

“wherein the parity calculation module comprises an application specific  
integrated circuit (ASIC), and the one or more local buffers comprise SRAMs on the  
ASIC”.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

3. Claims (1 & 2) and 12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 3 of U.S. Patent No. 6,687,872, respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent substantially teaches the claimed invention. The patent does not explicitly teach that coefficients are chosen from a plurality of coefficient subsets, each the coefficient subset is classified based on a respective parity operation. However, it would have been obvious to one skilled in the art at the time the invention was made to realize that each coefficient would have been formed and chosen based on a respective parity operation. One having ordinary skill in the art would be motivated to realize so because the use of parity operation for generating coefficients are well-known in the art.

4. Claims 20 and 21-23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7 and 8-10 of U.S. Patent No. 6,687,872, respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent substantially teaches the claimed invention. The patent does not explicitly teach that

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coefficients are chosen from a plurality of coefficient subsets, each the coefficient subset is classified based on a respective parity operation. However, it would have been obvious to one skilled in the art at the time the invention was made to realize that each coefficient would have been formed and chosen based on a respective parity operation. One having ordinary skill in the art would be motivated to realize so because the use of parity operation for generating coefficients are well-known in the art.

5. Claims (24 & 25) and 35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 3 of U.S. Patent No. 6,687,872, respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent substantially teaches the claimed invention. The patent does not explicitly teach that parity coefficients are chosen from a plurality of coefficient subsets, each the coefficient subset is classified based on a respective parity operation. However, it would have been obvious to one skilled in the art at the time the invention was made to realize that each parity coefficient would have been formed and chosen based on a respective parity operation. One having ordinary skill in the art would be motivated to realize so because the use of parity operation for generating parity coefficients are well-known in the art.

***Response to Arguments***

6. Applicant's arguments filed 8/29/2005 have been fully considered but they are not fully persuasive.

Since no terminal disclaimer is being filed, the rejections for double patenting rejection (claims 15-19) and for obviousness-type double patenting (claim 1-2, 12, 20-25 and 35) are still sustained.

For art rejection of claims 13-19, examiner agrees with applicant's marks. Therefore, art rejection is withdrawn for these claims.


7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine T. Tu whose telephone number is (571)272-3831. The examiner can normally be reached on Mon-Thur. 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571)272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Christine T. Tu  
Primary Examiner  
Art Unit 2138

November 10, 2005